TRANSLATION PATENT COOPERATION TREATY POT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's	or agent's file reference 0113	FOR FURTHER	ACTION	See Form PCT/IPEA/416					
	al application No. JP2005/0018		late (day/month/year) 05	Priority date (day/month/year) 26.02.2004					
Internation	al Patent Classification	(IPC) or national classification and	l IPC						
B41J	11/04(2006.	01), B41J11/00	(2006.01)						
Applicant SEIK(O INSTRUMEN	ITS INC.							
	1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.								
2. T	his REPORT consists o	of a total of 4	sheets, including	g this cover sheet.					
3. T	his report is also accom	panied by ANNEXES, comprising	g:						
а	a. (sent to the a	pplicant and to the International B	Gureau) a total of	sheets, as follows:					
	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).								
	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental								
t	Box. b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))								
				_ , containing a sequence listing and/or tables					
		in computer readable form only, the Administrative Instructions).	as indicated in the Supple	mental Box Relating to Sequence Listing (see					
4. T		cations relating to the following ite	ems:						
	Box No. I	Basis of the report							
l Ē	Box No. II	Priority							
Ī	Box No. III	•	th regard to novelty, invent	ive step and industrial applicability					
	Box No. IV	Lack of unity of invention							
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement								
	Box No. VI	Certain documents cited							
	Box No. VII	Certain defects in the international	al application						
	Box No. VIII Certain observations on the international application								
Date of sub	omission of the demand		Date of completion of thi	is report					
Name and mailing address of the IPEA/JP			Authorized officer						
Facsimile No			Telephone No						

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International application No.

PCT/JP2005/001855

Вох	No. I	Basis of the report							
1.		n regard to the language, this report is based on the internat cated under this item.	ional application in the language in	which it was filed, unless otherwise					
			report is based on translations from the original language into the following language h is the language of a translation furnished for the purposes of:						
		international search (Rule 12.3 and 23.1(b))							
		publication of the international application (Rule 12	.4)						
		international preliminary examination (Rule 55.2 and	nd/or 55.3)						
2.	rece		rd to the elements of the international application, this report is based on (replacement sheets which have been furnished to the Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the						
		the international application as originally filed/furnished							
	\boxtimes	the description:							
		pages 1-7		as originally filed/furnished					
		pages*	received by this Authority on						
		pages*	received by this Authority on						
	\boxtimes	the claims:							
		nos.		as originally filed/furnished					
		nos.*							
		nos.* _1, 3-5	received by this Authority on	04.11.2005					
		nos.*	received by this Authority on						
	\boxtimes	the drawings:							
		sheets fig. 1-5		as originally filed/furnished					
		sheets*							
		sheets*							
		a sequence listing and/or any related table(s) – see Supple	quence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.						
3.	\boxtimes	The amendments have resulted in the cancellation of:							
		the description, pages							
		the claims, nos. 2	· · · · · ·						
		the drawings, sheets/figs	the drawings, sheets/figs						
		the sequence listing (specify):							
		any table(s) related to sequence listing (specify):							
4.		This report has been established as if (some of) the ame they have been considered to go beyond the disclosure as							
		the description, pages							
		the claims, nos.							
		the drawings, sheets/figs	the drawings, sheets/figs						
		the sequence listing (specify):							
		any table(s) related to sequence listing (specify):							
*	If ite	em 4 applies, some or all of those sheets may be marked "sı	iperseded."						

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Вох		Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; itations and explanations supporting such statement			
1.	Statement				
	Novelty (N)	Claims	1, 3-5	_ YES	
		Claims		NO	
	Inventive step (IS)	Claims	4	YES	
		Claims	1, 3, 5	_ NO	
	Industrial applicability (IA)	Claims	1, 3-5	YES	
		Claims		_ NO	

2. Citations and explanations (Rule 70.7)

- Document 1: JP 7-237324 A (Tamura Corp.), 12 September 1995, paragraphs [0012] to [0026] (Family: none)
- Document 2: JP 3-118173 A (Sharp Corp.), 20 May 1991, page 3, upper right column, lines 10 to 12 and page 3, lower left column, lines 1 to 4 (Family: none)
- Document 3: JP 2003-162070 A (Fuji Photo Film Co., Ltd.),
 06 June 2003, paragraph [0135] (Family: none)
- Document 4: JP 2000-301784 A (Kabushiki Kaisha Sato), 31 October 2000, claim 1 and paragraph [0013] (Family: none)
- Document 5: JP 8-156350 A (Seiko Epson Corp.), 18 June 1996, paragraph [0017] (Family: none)

Claims 1 and 3

The invention set forth in claim 1 does not involve an inventive step in the light of documents 1 to 3 cited in the international search report.

The inventions disclosed in documents 1 and 2 belong to the same technical field in that both inventions are mechanisms for driving a thermal printer. Such being the case, it would have been obvious to a person skilled in

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

the art to apply the feature disclosed in document 2, wherein the support shafts are formed as an integral member, in the invention disclosed in document 1.

In addition, document 3 discloses a feature wherein the printer components are created from a magnesium alloy, a titanium alloy or the like by means of a die cast molding technique.

Consequently, it would have been obvious to a person skilled in the art to configure the inventions set forth in claims 1 and 3 by employing a magnesium alloy, a titanium alloy or the like and applying a die cast molding technique when forming the support shafts as an integral member in the invention disclosed in document 1.

Claim 4

The printer wherein the flange member for mounting the motor is equipped with a locking mechanism, which interlocks with the tip of the gear support shaft that has been integrated with the gear mounting member, so that it is possible to position the motor for driving the rotation of the platen roller is not disclosed in any of the documents that are cited in the international search report, and would not have been obvious to a person skilled in the art.

Claim 5

The invention set forth in claim 5 does not involve an inventive step in the light of documents 1 to 5 cited in the international search report. Documents 4 and 5 disclose thermal heads wherein a plurality of heat generating elements are arranged in a row.